

verification or certification station as in the prior art. This is discussed at for example paragraph 0063 of the present application. Claim 35 and claim 37 relate respectively to a method of and apparatus for verifying data areas of tracks in which the method writes a certification pattern to a data area of a track and the apparatus of claim 37 is arranged to write a certification pattern to a data area of a track.

As recognized in the prior art, when a storage medium, .e.g., a hard disk is being manufactured, the hard disk is typically loaded into a mastering station known as a servo track writer. The servo track writer writes a pattern of magnetic information known as the servo pattern, which is made up of "servo frames". The servo pattern becomes the master reference which is used by the disk drive during normal operation in order for the head of the disk drive to be able to locate itself over the tracks and sectors on the disk when writing and reading data. As discussed at, for example, paragraph 0005 of the present application, it is desirable to be able to "verify" the servo frames that are written to the disk and to do this efficiently and quickly.

It is also desirable to be able to "certify" the data areas of a disk and to do this efficiently and quickly. As discussed at for example paragraph 0008 of the present application, this has conventionally been carried out in a separate machine known as a media certifier.

Thus, the claimed invention provides a novel and non-obvious method of writing a field of a servo frame or apparatus arranged to write a field of a servo frame wherein the writing of fields of a servo frame are interleaved with the reading of fields of a servo frame so that the fields can be verified on-the-fly during the servo writing process.

To the contrary, Teo fails to teach or suggest such a method or apparatus. In fact, Teo's apparatus actually relates to a hard disk drive when used during normal read/write operations by an end user during normal storage of data, but does not relate to servo track writing or media certification at all. That is, during normal use by an end user, the controller of a hard disk drive switches the read/write head between reading and writing modes. As discussed from paragraph 0060 onwards of Teo, a predetermined delay between reading and writing is built in, which allows for the fact that the read and write elements of the head are separated by a distance L. As discussed in Teo, particularly from paragraph 0066 onwards, it is a fact that the distance L between the read and write elements vary between hard disk drives owing to variations in tolerances during manufacture. Thus, Teo effectively tweaks

the delay on the read gage during normal read/write operations performed by an end user to compensate for this non-uniform separation L between different disk drives.

Inevitably, as in any technology field, there is some common language used in Teo and the description and claims of the present application; however, that overlap is simply a result of Teo disclosing a hard disk drive, which uses servo frames to position the read/write head over tracks on that hard disk.

Nevertheless, contrary to the Office Action's assertions, Teo fails to disclose inter alia the writing of servo frames or the writing of certification patterns as required by the respective independent claims of the present application. Rather, Teo does not teach or suggest a "servo track writer," does not carry out verification of fields of servo frames, and does not carry out certification of the medium. As explained above, each independent claim in the present application clearly includes at least either the feature of (i) writing a field of a servo frame or (ii) writing a certification pattern to a data area of a track (or is apparatus arranged to do such operations). Accordingly, at least because of these distinctions, each independent claim is clearly novel over Teo. Furthermore, there is no teaching or suggestion in Teo of the interleaving concept as claimed in the independent claims of the present application.

Therefore, Teo fails to teach or suggest on the subject of servo track writing and, instead, relates only to a hard disk drive when in end use.

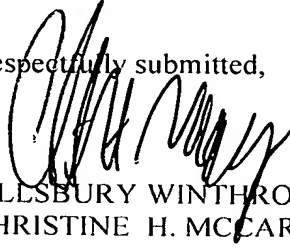
Furthermore, based on the above discussion, Applicant also formally requests reconsideration of the restriction requirement because, as should be readily apparent, claims 1-14 are clearly directed to the same inventive subject matter as claims 15-51: all independent claims rely on the same concept of interleaving of reading and writing of information to a storage medium. The Office's basis for the restriction requirement is erroneous because it mischaracterized the nature of claims 15-51 as limiting them to access of a dynamic storage device. There can be no doubt that each of independent claims 1, 8, 15, 22, 27, 32, 38, 45, 48 and 51 relates to either a method of writing a field of a servo frame or apparatus arranged to write a field of a servo frame. Therefore, Applicant requests that claims 1-14 be reintroduced properly into the present application.

All rejections and objections having been addressed, it is respectfully submitted that the present application is now in condition for allowance, and a notice to that effect is earnestly solicited. Should there be any questions or concerns regarding this application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

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Respectfully submitted,



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